

**Notice of Allowability**

Application No.

10/076,635

Examiner

Russell Frejd

Applicant(s)

NAKAGAWA ET AL.

Art Unit

2128

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicant's amendment received 30 August 2006.
2. ☒ The allowed claim(s) is/are 1-39.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

*RUSSELL FREJD*  
**RUSSELL FREJD**  
**PRIMARY EXAMINER**

In re Application of: Nakagawa et al.

***Allowance of Application # 10/076,635***

1. The following communication is in response to applicant's amendment received 30-August-2006, and the telephonic interview conducted on 20-July-2007. Claims 1-39 are pending in the application.

***Examiner's Amendment***

2. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee. Authorization for this Examiner's Amendment was given by Timothy Kang (Reg. No. 46,423) on 20-July-2007.

**2.1** In the Claims:

|          |         |   |
|----------|---------|---|
| claim 1  | line 10 | Change "one or more of the parameters" to --one or more parameters--. |
| claim 32 | line 4  | Change "in the system" to --stored in the computerized system--.      |
| claim 39 | line 9  | Change "one or more of the parameters" to --one or more parameters--. |

In re Application of: Nakagawa et al.

***Reasons for Allowance***

3. The following is an Examiner's Statement of Reasons for the indication of allowable subject matter.

3.1 The following is an Examiner's Statement of Reasons for the indication of allowable subject matter. The instant application is directed to a non-obvious improvement over the inventions described in the related prior art, and specifically the invention in U.S. Patent No. 7,020,586 to Snevely, which describes the design of a data center based on requirements of equipment to be installed, and/or selecting a configuration of computer equipment to be installed in a data center based on the capacities of the data center.

3.2 The improvement of the present invention, in various embodiments, uses a computer to design the physical layout of an Internet Data Center (IDC) cooling based on one or more constraints and a determined profile for each cell of a plurality of cells arranged within the IDC, such that the IDC cooling is arranged to model conditions within the IDC to stay within the assigned one or more constraints and the determined profile of each cell. This patentable distinction is included in each of the independent claims, nos. 1, 17, 32 and 39.

The present invention discloses cells (global, local, and special, see specification p. 4, ln. 11) which are defined as a cluster of racks, AC units, the ceiling, the subfloor, etc, to accomplish the invention. In contrast, Snevely uses equipment units (EUs) for particular pieces of equipment, which are entirely different in scope.

3.3 The art of record, either individually or in combination, fails to teach, suggest, or render obvious the method of designing a physical layout for an Internet Datacenter (IDC) cooling, having the corresponding structure which is disclosed in the specification and equivalents

In re Application of: Nakagawa et al.

thereof at least at page 3, line 22 through page 15, line 4, and Figures 1-5. In view of the foregoing, the claims of the present application are found to be patentable over the prior art.

***Response Guidelines***

4. Any comments considered necessary by applicant **MUST** be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should clearly be labeled "Comments on Statement of Reasons for Allowance".

**4.1 Any response to the Examiner in regard to this allowance should be**

**directed to:** Russell Frejd, telephone number (571) 272-3779, Monday-Friday from 0530 to 1400 ET, **or** the examiner's supervisor, Kamini Shah, telephone number (571) 272-2279. Inquires of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist (571) 272-2100.

**mailed to:** Commissioner of Patents and Trademarks  
P.O. Box 1450, Alexandria, VA 22313-1450

**or faxed to:** (571) 273-8300

*Hand-delivered responses should be brought to the Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA, 22314.*

Date: 23-July-2007

  
\_\_\_\_\_  
RUSSELL FREJD  
PRIMARY EXAMINER